What is claimed

1. An insulating material, comprising in weight percent about 20-60% low melt bicomponent fiber, 10-40% high melt bicomponent fiber and 20-60% staple fiber.

2. The material of claim 1, including an average fiber diameter of between about 10-30 microns.

3. The material of claim 1, including an average fiber diameter of between about 16-24 microns.

4. The material of claim 1, including an average fiber diameter of between about 18-22 microns.

5. The material of claim 1, wherein said material has a density of between about 1.0-10.0 pcf and a flexural strength of between about 40-1200 psi.

6. The material of claim 5, wherein said material has the acoustical absorption coefficients as follows:

freq (Hz)	@ 2 pcf density
500	0.17-0.24
1000	0.29-0.63
2000	0.50-0.94
4000	0.71-0.99

7. The material of claim 6, wherein said material has a thermal conductivity value of between about 0.20 and 0.30 at 2 pcf density.

8. The material of claim 1, wherein said low melt and high melt bicomponent fibers are a concentric sheath/core CoPET/PET.

9. The material of claim 8, wherein said staple fibers are selected from a group of materials consisting of polyester fibers, polyethylene fibers, polypropylene fibers, nylon fibers, rayon fibers, glass fibers, natural fibers and mixtures thereof.

10. The material of claim 1, wherein said material has the acoustical absorption coefficients as follows:

freq (Hz)	@ 2 pcf density
500	0.17-0.24
1000	0.29-0.63
2000	0.50-0.94
4000	0.71-0.99

11. The material of claim 10, wherein said material has a thermal conductivity value of between about 0.20 and 0.30 at 2 pcf density.

12. The material of claim 11, wherein said staple fibers are selected from a group of materials consisting of polyester fibers, polyethylene fibers, polypropylene fibers, nylon fibers, rayon fibers, glass fibers, natural fibers and mixtures thereof.

13. The material of claim 1, wherein said staple fibers are selected from a group of materials consisting of polyester fibers, polyethylene fibers, polypropylene fibers, nylon fibers, rayon fibers, glass fibers, natural fibers and mixtures thereof.

14. The material of claim 13, wherein said low melt bicomponent fibers are selected from a group of materials consisting of copolyester/ polyethylene terephthalate, poly 1,4 cyclohexanedimethyl terephthalate/polyethylene terephthalate, poly 1,4 cyclohexanedimethyl terephthalate/ polypropylene, glycol-modified polyethylene terephthalate/ polyethylene terephthalate, propylene/polyethylene terephthalate, nylon 6/nylon 66, polyethylene/glass, polymer/natural fibers and mixtures thereof that yield differential melt flow temperatures.

15. The material of claim 14, wherein said bicomponent fibers are in a configuration selected from a group consisting of sheath-core, side-by-side, segmented pie and mixtures thereof.

16. The material of claim 14, wherein said low melt bicomponent fibers have a melt flow temperature of about 100 to about 130°C.

17. The material of claim 13, wherein said high melt bicomponent fibers are selected from a group of materials consisting of copolyester/ polyethylene terephthalate, poly 1,4 cyclohexanedimethyl terephthalate/polyethylene terephthalate, poly 1,4 cyclohexanedimethyl terephthalate/ polypropylene, glycol-modified polyethylene terephthalate/ polyethylene terephthalate, propylene/polyethylene terephthalate, nylon 6/nylon 66, and mixtures thereof that yield differential melt flow temperatures.

18. The material of claim 17, wherein said high melt bicomponent fibers are in a configuration selected from a group consisting of sheath-core, side-by-side, splitable segmented pie and mixtures thereof.

19. The material of claim 17, wherein said high melt bicomponent fibers have a melt flow temperature of about 170 to about 200°C.

20. The material of claim 17, wherein crystalline/semicrystalline bicomponent fibers having a melt flow temperature of about 150 to about 180°C are substituted in part or whole for said high melt bicomponent fiber.